CLAIMS

What is claimed is:

1   1.   A method, comprising:

2   receiving a request for an information object at an address identified by a uniform resource

3   locator (URL); and

4   mapping the URL to a corresponding anycast address for the information object.

1   2.   The method of claim 1 further comprising using resolving the anycast address for the

2   information object to a unicast address for the information object.

1   3.   The method of claim 2 further comprising sending the information object to the client.

1   4.   The method of claim 3 wherein the request is received at an information object repository that is

2   topologically closer to the client than any other information object repository.

1   5.   The method of claim 4 wherein the information object repository is selected according to

2   specified performance metrics.

1   6.   The method of claim 5 wherein the performance metrics comprise one or more of: average

2   delay from the selected information object repository to a source of the request, average processing

3   delay at the selected information object repository, reliability of a path from the selected

4   information object repository, available bandwidth in said path, and loads on the selected

5   information object repository.

1   7.   An information object repository configured to map a uniform resource locator (URL) for an

2   information object to a network layer anycast address.

3   8.   The information object repository of claim 7 being further configured to advertise anycast

4   address using a network layer anycast routing protocol.

1   9.   A network, comprising:

2   at least one client configured to request an information object using a uniform resource

3   locator (URL); and

4   an information object repository configured to receive the request for the information

5   object and to map the URL into a network layer anycast address.

1   10.   The network of claim 9 wherein the information object repository is further configured to

2   resolve the network layer anycast address into a unicast address.

1   11.   The network of claim 10 wherein the information object repository is topologically closer to

2   the requesting client than any other of a number of information object repositories in the network.

3   12.   The network of claim 11 further comprising a Web router configured to select the information

4   object repository that is closer to the requesting client than any other of the number of information

5   object repositories in the network without regard as to whether the information object is actually

6   stored at the selected information object repository.

1   13.   The network of claim 12 wherein the Web router is further configured to select the selected

2   information object repository according to specified performance metrics.

1   14.   The network of claim 13 wherein the performance metrics comprise one or more of: average

2   delay from the selected information object repository to a source of the request, average processing

3   delay at the selected information object repository, reliability of a path from the selected

4   information object repository, available bandwidth in said path, and loads on the selected

5   information object repository.